

**Rules and Regulations**  
**Western Kansas Groundwater Management District No. 1**  
**Division of Water Resources**  
**Kansas Department of Agriculture**  
**January 24, 2003**

**5-21-1. Definitions.** As used in these rules and regulations, the following words and phrases shall have the meaning ascribed to them in this section.

(a) "Aquifer" means a geologic water-bearing formation that will yield considerable quantities of water to wells and springs.

(b) "Board" means the board of directors constituting the governing body of the western Kansas groundwater management district no. 1.

(c) "Chief engineer" means the chief engineer of the division of water resources of the Kansas state board of agriculture.

(d) "District" means the western Kansas groundwater management district no. 1.

(e) "Authorized representative of the board" means an individual designated by the board to perform duties and functions on its behalf.

(f) "Groundwater" means water below the surface of the earth.

(g) "Substantially" means within 300 feet of the approved location, but in no case closer to other wells than the minimum spacing requirements allow.

(h) "Tailwater" means that portion of the irrigation water applied which appears as run-off from the authorized place of use.

(i) "Tailwater re-use system" means a facility to collect, store and transport irrigation tailwater for reapplication to the authorized place of use.

(j) "Unconsolidated aquifer" means unconsolidated deposits that will yield water in a sufficient quantity to supply pumping wells and springs.

(k) "Waste of water" means any act or omission which causes:

(1) groundwater to be diverted or withdrawn from a source of supply and not used, managed or reapplied to a beneficial use on or in connection with land authorized as the place of use by a vested right, an appropriation right or an approved application for permit to appropriate water for beneficial use;

(2) the unreasonable deterioration of the quality of water in any source of supply thereby causing impairment of a person's right to the use of water;

(3) groundwater intended for irrigation use to escape and drain from the authorized place of use; or

(4) groundwater to be applied to an authorized beneficial use in excess of the needs for such use.

(l) "Well" means any excavation that is drilled, cored, bored, washed, driven, dug or otherwise constructed when the intended use of such excavation is for the acquisition, diversion, or artificial recharge of groundwater. (Authorized by K.S.A. 82a-1028(o); effective May 1, 1979; amended May 23, 1994.)

**5-21-2. Tailwater control and waste.** No water user shall allow water which is pumped or diverted from any aquifer to leave the land under the water user's direct supervision and control. If the water is re-used, the user shall apply the water consistent with the approved application to appropriate water for beneficial use, vested right, or appropriation right. All water users shall construct and operate the water distribution systems in a manner as to prevent waste of water, and

shall do everything necessary and proper to preserve the quality of the groundwater resources within the district. (Authorized by K.S.A. 1978 Supp. 82a-1028(o); effective May 1, 1979.)

**5-21-3. Well spacing requirements.** (a) Each well location described in an application for a permit to appropriate water for a beneficial use, other than domestic use, which proposes the diversion or withdrawal of water from the Ogallala formation shall be spaced a minimum of 2640 feet from all other non-domestic wells in the Ogallala aquifer.

(b)(1) Each well location described in an application to appropriate water for a beneficial use, other than domestic use, which proposes the diversion or withdrawal of water from the Dakota aquifer shall be spaced a minimum of two thousand six hundred forty (2,640) feet from any other well constructed into the same Dakota aquifer.

(2) Each Dakota well shall be sealed off between the Dakota aquifer and any other aquifers in such a manner as to prevent migration of water to or from the Dakota aquifer and any other aquifers.

(c) Each well included in an application to appropriate water for a beneficial use, other than domestic use, which proposes the diversion or withdrawal of water shall be a minimum of 1,320 feet away from a domestic well constructed into the same aquifer unless the applicant has received written permission from the neighboring well owner or the domestic wells are owned by the applicant.

(d) The location of a well or wells on an application for approval to change the point of diversion under an existing water right shall be no more than 1,320 feet from the originally authorized point of diversion and shall:

(1) not decrease the distance to other wells or authorized well locations by more than 300 feet; or

(2) meet the minimum well spacing requirements in this regulation.

(e) A new well shall be drilled in a location substantially as shown on the approved application and the accompanying map, plat, or aerial photograph.

(f) Exceptions to this well spacing regulation may be granted on an individual basis by recommendation of the board in conjunction with the approval of the chief engineer. The applicant may be required by the board to submit information as it deems necessary in order to make the determination. (Authorized by K.S.A. 82a-1028(o); effective May 1, 1979; amended May 23, 1994.)

**K.A.R. 5-21-4. Safe yield.** (a) Except as set forth in subsection (c), the district shall be closed to further new appropriations of water in all areas where the total saturated thickness of the unconsolidated aquifer, commonly known as the Ogallala, meets either of these criteria:

(1) Has been depleted by 15 percent or more since 1950, as determined according to K.A.R. 5-21-8; or

(2) is less than 40 feet thick, as determined according to K.A.R. 5-21-9.

(b) In the rest of the district, the approval of each application for a permit to appropriate water for a beneficial use, except as set forth in subsection (c), from the Ogallala aquifer, and the approval of each application for a change in the point of diversion if the diversion works have not been completed under the original approved application, shall be subject to the following criteria:

(1) The proposed appropriation, when added to the vested rights, prior appropriation rights, and earlier priority applications, shall not exceed the allowable safe yield amount for the area included within a two-mile-radius circle, which is approximately 8,042 acres, of the proposed well.

(2) For the purpose of analysis, all vested rights, certificates, permits, and prior unapproved applications shall be considered to be fully exercised, and all limitation clauses listed on permits to appropriate water and certificates shall be considered to be in force.

(3) In the case of an application for change in the point of diversion referred to in subsection (b), each application and water right with a priority earlier than the priority established by the filing of the application for change shall be included in the analysis.

(4) The allowable annual safe yield amount shall be calculated using the following formula:

$$Q = AR/12$$

Q = the allowable annual safe yield amount in acre-feet per year

A = area of consideration, within a two-mile-radius circle, approximately 8,042 acres

R = average annual recharge of 0.5 inches per year

(5) If part of the radial area is located outside the district boundary, it shall be included in the depletion analysis only if the chief engineer determines that hydraulically connected groundwater exists in that portion of the area outside the district. A part of the area of consideration lying outside the state of Kansas shall not be included in the analysis.

(6) If wells authorized under a vested right, a certified water right, or a permit to appropriate water are divided by the circumference of the radial area, the authorized quantity of

water shall be assigned to each well. If specific quantities are not authorized for each well, a proportional amount shall be assigned to each well.

(c) This regulation shall not apply to the following:

(1) Domestic use;

(2) temporary permits; and

(3) a new application filed to appropriate groundwater in any area of the district not closed by regulation or intensive groundwater use control area order by the chief engineer to new nondomestic, nontemporary permits and term permits for five or fewer years, meeting all of the following criteria:

(A) The sum of the annual quantity requested by the proposed appropriation and the total annual quantities authorized by prior permits allowed because of an exemption pursuant to this subsection does not exceed 15 acre-feet in a ½-mile-radius circle surrounding the proposed point of diversion.

(B) Well spacing criteria in the area have been met.

(C) The approval of the application does not authorize an additional quantity of water out of an existing authorized well with a nondomestic permit or water right that would result in a total combined annual quantity of water authorized from that well in excess of 15 acre-feet.

(D) All other criteria for approving a new application to appropriate water at that location have been met.

(d) Exceptions to this regulation may be granted on an individual basis by recommendation by the board in conjunction with the approval of the chief engineer. The applicant may be required by the board to submit information necessary in order to make the determination.

(Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective May 23, 1994; amended Sept. 22, 2000.)

**K.A.R. 5-21-5. Battery of wells.** Within the boundaries of the district, an application for change of point of diversion from one well to a battery of wells shall not be approved unless the application meets the following criteria:

(a) The proposed points of diversion constitute a "battery of wells" as defined in K.A.R. 5-1-1.

(b) If the application for change has been filed pursuant to an appropriation right, the certificate shall be issued before approval of the application for change.

(c) The maximum annual quantity and maximum instantaneous diversion rate approved shall not exceed the maximum annual quantity and the maximum instantaneous diversion rate actually used during any of the three consecutive full calendar years before the application.

(d) The application meets the criteria for the approval of a new application. However, the wells comprising the battery of wells shall not be required to meet the well spacing requirements of K.A.R. 5-21-3 in relationship to each other. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective Sept. 22, 2000.)

**K.A.R. 5-21-6. Water-measuring devices.** (a) Except as specified in subsections (b) and (e), each well authorized after the effective date of this regulation within the boundaries of the district shall be equipped with a water flowmeter that is installed and maintained in accordance with the specifications in K.A.R. 5-1-4 through 5-1-12. Each water right owner shall maintain the water flowmeter so that the flowmeter functions properly whenever the diversion of water can reasonably

be expected to occur. If the water flowmeter fails to function properly, the owner shall promptly initiate action to repair or replace the meter, or to correct any problems with the installation.

(b) If the owner of the water right demonstrates to the board that the installation of a water flowmeter meeting the requirements of subsection (a) is not feasible, the installation of an hour meter in lieu of a water flowmeter may be approved by the board. Installation of a water flowmeter shall be considered to be not feasible if all of the following conditions are met:

(1) The diversion works and the delivery system are both in existence before the order of the board to install a water-measuring device.

(2) The owner enters into a written agreement with the district providing that the owner will perform the following:

(A) Notify the district whenever the diversion works or the delivery system is modified; and

(B) install a water flowmeter when the diversion works or delivery system is modified, unless a waiver is granted by the board.

(3) Either of the following conditions is met:

(A) The normal operating rate of diversion is less than 200 gallons per minute.

(B) The diameter of the existing pipe is too large for the normal operating flow rate so that full pipe flow cannot be maintained through a water flowmeter.

(c) Each well location authorized before the effective date of this regulation and located within the boundaries of the district shall be equipped with a water-measuring device that was acceptable at the time the water-measuring device was required. Waivers or exemptions to the



installation of a water flowmeter granted by the district before the effective date of this regulation shall be considered to be effective until one of the following occurs:

- (1) The well is redrilled.
- (2) The delivery system is modified.
- (3) The water-measuring device is no longer functioning properly and is not promptly repaired.
- (4) The district or the chief engineer orders that the well be equipped with a water flowmeter.

(d) An hour meter installation shall be deemed acceptable if all of the following requirements are met:

(1) The hour meter shall be enclosed in a weatherproof box and installed on a stand or post separate from, but adjacent to, the pumping plant base.

(2) The wiring from the pumping plant to the hour meter shall be at least 16 gauge and shall be enclosed in a conduit.

(3) All electrical connections shall be firmly attached.

(c) The following types of water use shall be exempt from the requirements of this regulation:

- (1) Domestic use; and
- (2) temporary use. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028, as amended by L. 2002, Ch. 137, § 5; implementing K.S.A. 82a-1028, as amended by L. 2002, Ch. 137, § 5 and K.S.A. 2001 Supp. 82a-1903, as amended by L. 2002, Ch. 137, § 7; effective Jan. 24, 2003.)

**K.A.R. 5-21-7. Change in the use made of water from irrigation use to any other type of beneficial use.** A change in the use made of water from irrigation use to any type of beneficial use shall not be approved if any of the following conditions is met: (a) The application for change does not meet the requirements of K.A.R. 5-5-9.

(b) The rate of diversion applied for exceeds the rate of diversion as determined by a test of the normal operating rate of diversion conducted within 1,095 days before the date the application for change was filed.

(c) The maximum annual quantity of water applied for is in excess of any of the following:

- (1) The maximum annual quantity of water determined for a vested right;
- (2) the maximum annual quantity of water certified; or
- (3) the average annual quantity of water actually used in the preceding 10 calendar years, excluding those years in which the water right was enrolled in the water right conservation program, the conservation reserve program, or any other multiyear water conservation program approved by the chief engineer. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028, as amended by L. 2002, Ch. 137, § 5; implementing K.S.A. 82a-1028, as amended by L. 2002, Ch. 137, § 5 and K.S.A. 2001 Supp. 82a-1903, as amended by L. 2002, Ch. 137, § 7; effective Jan. 24, 2003.)

**K.A.R. 5-21-8. Percent change of saturated thickness.** The map titled “percent change in saturated thickness of the High Plains aquifer, west central Kansas, 1950 to average 1997-1999” and designated as the Kansas geological survey open file report 2000-15B, dated July 25, 2000, is hereby adopted by reference. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective Sept. 22, 2000.)

**K.A.R. 5-21-9. Saturated thickness.** The map titled “saturated thickness of unconsolidated aquifer, west central Kansas average 1997-1999” and designated as the Kansas geological survey open file report 2000-15A, dated July 25, 2000, is hereby adopted by reference. (Authorized by K.S.A. 82a-706a and K.S.A. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective Sept. 22, 2000.)

*Please note: Where this document refers to the Kansas state board of Agriculture, that reference is now deemed to apply to the Kansas department of Agriculture, pursuant to K.S.A. 74-568. Effective May 4, 1995.*